

Notice of Allowability

Application No.

10/067,315

Examiner

Kenneth J. Ramsey

Applicant(s)

SHEU ET AL.

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to ____.
2. ☒ The allowed claim(s) is/are 1-33.
3. ☒ The drawings filed on 2/7 & 4/29 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: ____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. ____.
 - (b) ☐ including changes required by the proposed drawing correction filed ____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. ____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. ____ |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. ____ | 6 <input type="checkbox"/> Examiner's Amendment/Comment |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: claim 1 is allowed since the prior art does not teach or suggest the claimed process including forming opening in a dielectric layer which separates the gate layer from the cathode layer, forming a sacrificial layer on the surrounding region of the opening and on the gate layer, dispersing a carbon nanotube solution in the opening using screen printing, executing a thermal process step and removing the hydrophobic layer; claim 9 is allowed since the prior does not teach or suggest the claimed process including forming a hydrophilic layer in the opening of a dielectric layer which separates the gate layer from the cathode layer, forming a hydrophobic layer on the surrounding region of the opening and on the gate layer and dispersing a carbon nanotube solution on the hydrophilic layer by ink jet printing executing a thermal process step and removing the sacrificial layer, Claim 17 is allowed since the prior art does not teach or suggest the claimed process including forming a cathode layer , a gate layer separated from the cathode layer by a dielectric layer, there being an opening in the gate layer and dielectric layer, forming a carbon nanotube photo resist layer on the gate layer and in the opening by spin coating, and patterning the carbon nanotube photoresist in a predetermined pattern, and executing a thermal process step, claim 25 is allowed since the prior does not teach or suggest the claimed process including forming an adhesive layer in the opening of a dielectric layer which separates the gate layer from the cathode layer, forming a sacrificial layer on the surrounding region of the opening and on the

gate layer and dispersing a carbon nanotube solution on the adhesive layer by an electrophoretic process, executing a thermal process step and removing the sacrificial layer. The remaining claims are allowed because they depend from and contain the limitations of the above claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Conclusion

Directions for Responses

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth J. Ramsey whose telephone number is 308-2324. The examiner can normally be reached on M-F from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (703) 305-4794. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0956.


Kenneth J. Ramsey
Primary Examiner
Art Unit 2879